

ABSTRACT OF THE DISCLOSURE

System and methods for improved uplink signal detection where when a mobile device detects signaling indicating the presence of a packet for that mobile device from a network node, the mobile device may transmit one or more NACKs in a sub-frame before the one in which the mobile device would transmit the normal ACK/NACK for the packet. Additionally, the mobile device may transmit one or more NACKs in the sub-frame immediately following the normal ACK/NACK for a packet (unless a packet was transmitted in the immediately following sub-frame and successfully decoded by the mobile device, in which case an ACK would obviously be transmitted). Therefore, extra uplink (UL) interference is eliminated. Moreover, the amount that a network node must offset its ACK/NACK decision threshold is significantly reduced. This results in a reduction of required ACK power by a mobile device.